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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/849,294

05/19/2004

Frederic Plante

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EXAMINER

WEI, ZHENG

ART UNIT

PAPER NUMBER

2192

MAIL DATE

DELIVERY MODE

07/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,294	<b>Applicant(s)</b> PLANTE, FREDERIC	
	<b>Examiner</b> ZHENG WEI	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Action**

***Remarks***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/14/2008 has been entered.
2. This office action is in response to the amendment filed on 04/14/2008.
3. Claim 1 has been amended.
4. Claims 7, 8, 15 and 16 have been cancelled.
5. Claims 1-4 remain pending and have been examined.

***Response to Arguments***

6. Applicant's arguments filed 04/14/2008 have been fully considered but they are not persuasive. For Example:
  - At page 5, last paragraph, the Applicant argues that Coad teaches only modification of a single artifact (i.e., software code) between synchronizations. The synchronization process then “updates” the synchronized to be consistent with the changes made to the source code,

Coad does not teach or suggest how to processed if both the UML and source code are independently changed between synchronizations.

However, the Examiner respectfully disagrees.

First of all, Coad does teach modification of both first and second artifact between synchronizations, not only modification of a single artifact. As Coad disclosed at Fig.2, the first artifact (item 204- graphical representation) and second artifact (item 206, textual representation) and related text description at col.4, last paragraph – col.5, first paragraph, the improved software development tools provides simultaneous round-trip engineering[emphasis added], i.e., the graphical representation 204 is synchronized with the textual representation 206. Thus, if a change is made to the source code 202 via the graphical representation 204, the textual representation 206 is updated automatically. Similarly, if a change is made to the source code 202 via the textual representation 206, the graphical representation 204 is updated to remain synchronized [emphasis added]. Therefore, each of the first artifact (item 204- graphical representation) and the second artifact (item 206, textual representation) can be modified independent of a modification to the other artifact after a last synchronization. Fig.13, also discloses more clear view of the first artifact (item 1300, graphical view – model) and second artifact (textual view, code), modifying to each one of the view (artifact) will automatically update/synchronize the other view (artifact). Moreover, Coad discloses how to proceed if both the UML and source code are independently

changed between synchronizations in Fig.1, UML (102) uses Code Generator (110) to generate Source code (104 and further generating UML using Reverse Engineering Module(106).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Coad (Coad et al., US 6,851,107 B1)

Claim 1:

Coad discloses a method/system for synchronizing a first artifact and a second artifact, the first and second artifacts being interdependent and each artifact being modified independent of a modification to the other artifact after a last synchronization (see for example, col.4, last paragraph – col.5, first paragraph), the first (Fig.2, item 204- graphical representation) and second artifacts (Fig.2, item 206, textual representation) each having a plurality of elements and being of different formats, the method comprising:

- Performing a reverse engineering operation to generate a temporary artifact having all the elements of a last synchronized version of the first artifact and

- having all the elements of a latest version of the second artifact transformed as the first artifacts (see for example, Fig.1, step 102 “UML”-step 108 ->step 108 “Repository”->step 110 “Code Generator->step 104 “Source Code” and related text; also see Fig.2, step 202 “Source Code” ->step 200 “Transient Meta Model” -> step 208 “Incremental Code Editor” -> step 203 “Source Code” and related text)
- merging the temporary artifact and a latest version of the first artifact to create a synchronized version of the first artifact (see for example, Fig.2, steps 205, 205 -> step 208 “Incremental Code Editor” -> step 203 “Source Code” and related text); and
  - performing a forward engineering operation to generate a synchronized version of the second artifact having all the elements of the latest version of the second artifact and having all the elements of the synchronized version of the first artifact transformed as the second artifact (see for example, Fig.1, step 104 “source code” -> step 106 “Reverse Engineering Module” ->step 108 “Repository”->step 102 “UML”-step 108 ->step 110 “Code Generator->step 104 “Source Code” and related text; also see Fig.2, step 202 “Source Code” ->step 200 “Transient Meta Model” -> step 208 “Incremental Code Editor” -> step 203 “Source Code” and related text)

Claim 2:

Coad also discloses the method/system of claim 1 wherein one of the first and second artifacts is a software model artifact and the other of the first and second artifacts is a code artifact (see for example, Fig.1, step 104 "Source Code", step 102 "UML"; also see Fig.2, step 202 "Source Code", step 200 "Transient Meta Model" and related text)

Claim 3:

Coad further discloses the method of claim 2, wherein the software model artifact is a UML file (see for example, Fig.1, step 102 "UML" and related text; also see col.15, lines 54-55, "Further, although the present invention is described and shown using the various views of the UML...")

Claim 4:

Coad also discloses the method of claim 2, wherein the code artifact is a 3GL source file. (see for example, Fig.13, the example screenshot including UML model and 3GL source code (Java source code))

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571)

270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. W./

Examiner, Art Unit 2192

/Tuan Q. Dam/

Supervisory Patent Examiner, Art Unit 2192